



2578-3982.3US sequence listing.ST25

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Schouten, Govert J.
Bout, Abraham

<120> Means and Methods for Fibroblast-Like or Macrophage-Like Cell Transduction

<130> 2183-3982.2US

<140> 09/517,898

<141> 2000-03-03

<150> 60/122,732

<151> 1999-03-03

<160> 39

<170> PatentIn version 3.3

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<400> 8
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<400> 9
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<400> 10
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<210> 11
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<400> 11
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atcg 64

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<210> 18
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<400> 18
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fiber protein derived from adenovirus serotype

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<220>
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<400> 22
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36

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<212> DNA
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<220>
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<400> 26
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<212> DNA
<213> Artificial sequence

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<223> Chemically synthesized oligonucleotide for amplification of DNA encoding fiber protein derived from adenovirus serotype

<400> 29
gccatgcatt tattgttctg ttacataaga 30

<210> 30
<211> 37
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<213> Artificial sequence

<220>
<223> Chemically synthesized oligonucleotide for amplification of DNA encoding fiber protein derived from adenovirus serotype

<400> 30
ccgttaatta agcccttatt gttctgttac ataagaa 37

<210> 31
<211> 30
<212> DNA
<213> Artificial sequence

<220>
<223> Chemically synthesized oligonucleotide for amplification of DNA encoding fiber protein derived from adenovirus serotype

<400> 31
ccgatgcatt cagtcacatcyt ctwtaataata 30

<210> 32
<211> 1068
<212> DNA
<213> Artificial sequence

<220>
<223> DNA encoding Adenovirus Ad5/fib16 chimeric fiber

<400> 32
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agcagctcac aacaccctt tataaacctt ggtttcattt cctcaaatgg ttttgacaa 120
agcccagatg gagttctaac tcttaaatgt gttaatccac tcactaccgc cagcggaccc 180
ctccaactta aagttggaag cagtcttaca gtagatacta tcgatgggtc tttggaggaa 240
aatataactg ccgaagcgcc actcactaaa ctaaccactc cataggttta ttaataggat 300
ctggcttgca aacaaaggat gataaacttt gtttatcgct gggagatggg ttggtacaa 360
aggatgataa actatgttta tcgctgggag atgggttaat aacaaaaaat gatgtactat 420
gtgccaaact aggacatggc cttgtgtttg actcttccaa tgctatcacc atagaaaaca 480
acaccttgat gacaggcgca aaaccaagcg ccaactgtgt aattaaagag ggagaagatt 540
ccccagactg taagctcact ttagttctag tgaagaatgg aggactgata aatggatata 600
taacattaat gggagcctca gaatatacta acaccttggt taaaacaatc aagttacaat 660

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aagtaacctg aacttttaaag acaaccaaaa catggctact ggaaccataa ccagtgccaa	780
aggcttcacg cccagcacca ccgcctatcc atttataaca tacgccactg agaccctaaa	840
tgaagattac atttatggag agtggtacta caaatctacc aatgggaactc tctttccact	900
aaaagttact gtcacactaa acagacgtat gttagcttct ggaatggcct atgctatgat	960
ttttcatggt ctctaaatgc agaggaagcc ccggaaacta ccgaagtcac tctcattacc	1020
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<210> 33
 <211> 1062
 <212> DNA
 <213> Adenovirus 16

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agcccagatg gagttctaac tcttaaattg gttaatccac tctactaccg cagcggaccc	180
ctccaactta aagttggaag cagtcttaca gtagatacta tcgatgggtc tttggaggaa	240
aatataactg ccgcagcgcc actcactaaa actaaccact ccataggttt attaatagga	300
tctggcttgc aaacaaagga tgataaactt tgtttatcgc tgggagatgg gttggtaaca	360
aaggatgata aactatgttt atcgctggga gatgggttaa taacaaaaaa tgatgtacta	420
tgtgccaaac taggacatgg ccttgtgttt gactcttcca atgctatcac catagaaaac	480
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ataacattaa tgggagcctc agaataact aacaccttgt ttaaaaaaca tcaagttaca	660
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ctaaaagtta ctgtcacact aaacagacgt atgttagctt ctggaatggc ctatgctatg	960
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<220>

<223> Chimeric Ad5/Fib16 protein

<400> 34

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1 5 10 15

Tyr Glu Asp Glu Ser Ser Ser Gln His Pro Phe Ile Asn Pro Gly Phe
20 25 30

Ile Ser Ser Asn Gly Phe Ala Gln Ser Pro Asp Gly Val Leu Thr Leu
35 40 45

Lys Cys Val Asn Pro Leu Thr Thr Ala Ser Gly Pro Leu Gln Leu Lys
50 55 60

Val Gly Ser Ser Leu Thr Val Asp Thr Ile Asp Gly Ser Leu Glu Glu
65 70 75 80

Asn Ile Thr Ala Ala Ala Pro Leu Thr Lys Thr Asn His Ser Ile Gly
85 90 95

Leu Leu Ile Gly Ser Gly Leu Gln Thr Lys Asp Asp Lys Leu Cys Leu
100 105 110

Ser Leu Glu Asp Gly Leu Val Thr Lys Asp Asp Lys Leu Cys Leu Ser
115 120 125

Leu Gly Asp Gly Leu Ile Thr Lys Asn Asp Val Leu Cys Ala Lys Leu
130 135 140

Gly His Gly Leu Val Phe Asp Ser Ser Asn Ala Ile Thr Ile Glu Asn
145 150 155 160

Asn Thr Leu Trp Thr Gly Ala Lys Pro Ser Ala Asn Cys Val Ile Lys
165 170 175

Glu Gly Glu Asp Ser Pro Asp Cys Lys Leu Thr Leu Val Leu Val Lys
180 185 190

Asn Gly Gly Leu Ile Asn Gly Tyr Ile Thr Leu Met Gly Ala Ser Glu
195 200 205

Tyr Thr Asn Thr Leu Phe Lys Asn Asn Gln Val Thr Ile Asp Val Asn
210 215 220

Leu Ala Phe Asp Asn Thr Gly Gln Ile Ile Thr Tyr Leu Ser Ser Leu

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225 230 235 240

Lys Ser Asn Leu Asn Phe Lys Asp Asn Gln Asn Met Ala Thr Gly Thr
245 250 255

Ile Thr Ser Ala Lys Gly Phe Met Pro Ser Thr Thr Ala Tyr Pro Phe
260 265 270

Ile Thr Tyr Ala Thr Glu Thr Leu Asn Glu Asp Tyr Ile Tyr Gly Glu
275 280 285

Cys Tyr Tyr Lys Ser Thr Asn Gly Thr Leu Phe Pro Leu Lys Val Thr
290 295 300

Val Thr Leu Asn Arg Arg Met Leu Ala Ser Gly Met Ala Tyr Ala Met
305 310 315 320

Asn Phe Ser Trp Ser Leu Asn Ala Glu Glu Ala Pro Glu Thr Thr Glu
325 330 335

Val Thr Leu Ile Thr Ser Pro Phe Phe Ser Tyr Ile Arg Glu Asp
340 345 350

Asp

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<210> 35
<211> 353
<212> PRT
<213> Adenovirus Ad16
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<400> 35

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20 25 30

Ile Ser Ser Asn Gly Phe Ala Gln Ser Pro Asp Gly Val Leu Thr Leu
35 40 45

Lys Cys Val Asn Pro Leu Thr Thr Ala Ser Gly Pro Leu Gln Leu Lys
50 55 60

Val Gly Ser Ser Leu Thr Val Asp Thr Ile Asp Gly Ser Leu Glu Glu
65 70 75 80

Asn Ile Thr Ala Ala Ala Pro Leu Thr Lys Thr Asn His Ser Ile Gly
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85

90

95

Leu Leu Ile Gly Ser Gly Leu Gln Thr Lys Asp Asp Lys Leu Cys Leu
 100 105 110

Ser Leu Gly Asp Gly Leu Val Thr Lys Asp Asp Lys Leu Cys Leu Ser
 115 120 125

Leu Gly Asp Gly Leu Ile Thr Lys Asn Asp Val Leu Cys Ala Lys Leu
 130 135 140

Gly His Gly Leu Val Phe Asp Ser Ser Asn Ala Ile Thr Ile Glu Asn
 145 150 155 160

Asn Thr Leu Trp Thr Gly Ala Lys Pro Ser Ala Asn Cys Val Ile Lys
 165 170 175

Glu Gly Glu Asp Ser Pro Asp Cys Lys Leu Thr Leu Val Leu Val Lys
 180 185 190

Asn Gly Gly Leu Ile Asn Gly Tyr Ile Thr Leu Met Gly Ala Ser Glu
 195 200 205

Tyr Thr Asn Thr Leu Phe Lys Asn Asn Gln Val Thr Ile Asp Val Asn
 210 215 220

Leu Ala Phe Asp Asn Thr Gly Gln Ile Ile Thr Tyr Leu Ser Ser Leu
 225 230 235 240

Lys Ser Asn Leu Asn Phe Lys Asp Asn Gln Asn Met Ala Thr Gly Thr
 245 250 255

Ile Thr Ser Ala Lys Gly Phe Met Pro Ser Thr Thr Ala Tyr Pro Phe
 260 265 270

Ile Thr Tyr Ala Thr Glu Thr Leu Asn Glu Asp Tyr Ile Tyr Gly Glu
 275 280 285

Cys Tyr Tyr Lys Ser Thr Asn Gly Thr Leu Phe Pro Leu Lys Val Thr
 290 295 300

Val Thr Leu Asn Arg Arg Met Leu Ala Ser Gly Met Ala Tyr Ala Met
 305 310 315 320

Asn Phe Ser Trp Ser Leu Asn Ala Glu Glu Ala Pro Glu Thr Thr Glu
 325 330 335

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Val Thr Leu Ile Thr Ser Pro Phe Phe Phe Ser Tyr Ile Arg Glu Asp
340 345 350

Asp

<210> 36
<211> 42
<212> DNA
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<220>
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<210> 37
<211> 19
<212> DNA
<213> Artificial sequence

<220>
<223> Chemically synthesized Primer NY-DOWN

<400> 37
ggagaccact gccatgttg 19

<210> 38
<211> 1103
<212> DNA
<213> Artificial sequence

<220>
<223> DNA encoding Adenovirus Ad5/fib16 chimeric fiber

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agcccagatg gagttctaac tcttaaatgt gttaatccac tcactaccgc cagcggaccc 180
ctccaactta aagttggaag cagtcttaca gtagatacta tcgatgggtc tttggaggaa 240
aatataactg ccgaagcgcc actcactaaa ctaaccactc catagggtta ttaataggat 300
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aggatgataa actatgttta tcgctgggag atgggttaat aacaaaaaat gatgtactat 420
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taacattaat gggagcctca gaatatacta acaccttggt taaaacaatc aagttacaat 660
cgatgtaaac ctgcgatttg ataatactgg ccaaattatt acttacctat catcccttaa 720
aagtaacctg aacttttaaag acaacaaaaa catggctact ggaaccataa ccagtgccaa 780
aggcttcattg cccagcacca ccgcctatcc atttataaca tacgccactg agaccctaaa 840

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tgaagattac atttatggag agtggtacta caaatctacc aatggaactc tctttccact	900
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ttcaacgtgt ttattttcaa ttg	1103

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 <211> 6
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 <213> Adenovirus

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